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ABSTRACT

This paper presents a collection of thoughts and observations about a grand theory of creativity in the arts. The theory elaborated in the paper is based upon the following five major bodies of psychological knowledge and research: (1) hemisphere differences and cerebral lateralization; (2) chemical balance in the brain and bipolar factors; (3) spatial intelligence and individual patterns; (4) gender related differences; and (5) Myers Briggs Type Indicator, the Jungian mode. The paper states that each of these five major categories provides various grids or lenses through which the creative artist and individual can and ought to be viewed. Contains 10 references. (Author/BT)

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A Model for a Grand Theory; Creativity in Art.

by Harold J. McWhinnie

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A MODEL FOR A GRAND THEORY; CREATIVITY IN ART

ABSTRACT

This paper presents a collection of thoughts and observations about a grand theory of creativity in the arts.

It is based upon five major bodies of psychological knowledge and research which are:

1] hemisphere differences and cerebral lateralization
2] chemical balance in the brain and bi-polar factors
3] spatial intelligence and individual patterns
4] gender related differences
5] Myers Briggs Type Indicator, the Jungian mode

Each of these five major categories provides various grids or lenses through which the creative artist and individual can and ought to be viewed.

BACKGROUND

While there have been many previous attempts in psychology, education, philosophy and in the arts to describe, explain, or otherwise present the creative personality, none has in our view tried to encompass so many diverse concerns as in this present attempt. Previous efforts such as those of Freud, Jung, Lowenfeld, and Mc Fee may have failed or were of necessity incomplete. While our attention here may not have any better luck, it seemed worth the risk. This model is proposed as no more or less then a grand

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theory designed to illume the creative personality in the arts. Each of the components have their own research and knowledge base; the combination of which are clearly more than a sum of the parts.[1]

THE CONCEPTUAL MODEL

It will be argued in this paper that the creative artist can be better viewed through a series of lenses or grids, each of which looks at an different dimension of human growth and development. The sum of the five separate grids can describe, or at least, identify specific variables of the creative personality in the arts. All five levels are needed to accomplish this goal, to date, frustrated by most of those efforts to present so comphrensive a view of the creative personality in the arts. ,(Barkan,1962) All takes place within the human brain; but there are five layers or levels each of which provides a unique view of the creative individual\creative process.

METHOD

Our data will come from history, from studies of creative personalities,from the arts, and from the sciences. It is based on

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historical data, empirical data, philosophical insights, psychological theory, as well as the nature of the artistic process. The ultimate data bank is the work of art.

The purpose of this paper is pure speculation. The final product may serve as a guide to future research, to theory development, and to empirical studies in the several fields or domains concerned. The final paper is in fact a theory about a theory.[2]

a] Cerebral Lateralization= The hemisphere lens

In the year 1844 the English doctor Arthur Wigan (1844) wrote a rather delightful book titled " The Duality of Mind". In that work he described the brain as having two distinct hemispheres, the right and the left. For Wigan and many who followed him in the brain sciences for the past 150 years, the left brain was the analytical, verbal, logical; the sequential engine of the mind (male); whereas the right brain was the intuitive, spatial ,musical, non-verbal, kineasethetic, mystical, mysterious, and the creative member

(female).[3] We do not need however to go back so far as to 1844, Joseph [1985] has described the right brain functions in essentially similar terms;- He wrote as follows:

[[Joseph quote here]

Other writers such as Betty Edwards (1978,1987) more directly introduced questions of cerebral dominance into the art education discourse. In her first book" Drawing from the Right Side of the Brain" she applied some of the research by Sperry (1963) in the nature of the split brain directly to problems in the teaching of drawing. In her second book," Drawing on the Artist Within" she continued and extended her basic argument beyond the teaching of drawing. This book became a more general inquiry into the nature of the creative process from the point of view of brain science.[4] For pour purposes this is the point of departure from what may be called the Edwards tradition in art education. Finally Edwards was also found to be incomplete in her descriptions. We looked elsewhere and found the conception of the five lenses or grids which became the conceptual model to be described in the balance of this paper.

In the future, new methods of brain imagining may make

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it quite possible, through direct observations of images of the brain, to locate specific areas which relate to specific creative and artistic tasks. We may be able to chart the progress of the creative process in a sequence of images. We should be able to produce more definitive data concerning the lateraliztion process as it enhances the creative process. Some of the specific research questions for those studies might well be:

1] What is the relationship of handedness to cerebral dominance?

2] Relationship of dyslexia to creative people?

3] Can right cerebral dominance be enhanced?

4] Can an individual learn to control the flow of sensory information to either hemisphere?

Gardner (1993) in his book" Creating Minds", has looked at the following creative individual:

Freud Graham

Picasso Eliot

Stranvisky Gandhi

Gardner's basic frame of reference was to consider those

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individuals as examples of what he described as multiple intelligences. The creative aspect of each of which heavily depended upon the function of the right hemisphere at least according to his post hoc analyses. In a very real sense, our model was the logicial next stept to Gardner's book and the idea grew out of readings in Gardner as well as other researchers in the brain sciences.

Jan Ehrenwald (1985) in his earlier book, "An Anatomy of Genius" produced an analysis of the split brain and global minds that was based upon an psychohistorical methodology. He considered the following individuals:

Beethoven	Jung	Kafka
Nietsche	Mozart	Garrett
Leonardo	Einstein	Cortes
Freud Picasso		

The research in the brain sciences in the past decade has established a knowledge base which ought to be considered as one of the foundational sources for any study of the creative process. It is one of our lenses through which we will attempt, in this book,

to view both the creative process, the creative individual, and maybe most important of all, the creative product. (Harrington,1992)

Ehrenwald (1985) looked at each of his creative individuals from the lens of history .He augured that one could clearly discern right hemisphere influences, processes, and dominance in the range of historical figures which he presented in his analysis. is book is highly speculative but his arguments have at least a theoritical sense of correctness.

In his view modern neuroscience, aided by psychoanalysis, Freudian, Jungian, or other; can at least provide a few clues about the mental machinery and the operation of the two sides of the brain that go into the making of genius. He focused on Beethoven for example in terms of the dichotomy between hero and anti-hero, between the perfection of his art and the imperfections of his personality. His treatments of Freud and Jung present and contrast the conflicting personalities of two men as personification of left and right hemispheres. His analysis is consistent with the later and more complete descriptions of some of the same individuals by Gardner(1993). In one sense at least, we can conceive of Gardner's

work as an replication of the findings of Ehrenwald. While Gardner did not necessarily start out to do a replication of "The Antamony of Genius", in fact he achieved just that and by so doing gave an increased sense of validity to both studies.

The available evidence suggests that genius emerges from the ideal cooperation and the integration of a favorable genetic endowment of the right and the acquired discipline and the cultural control of the left hemisphere. Ehrenwalds' book could be called the neuropsychology of genius. We can look at the creative individual through this basic lens of brain science, chart the balances and contradictions between the two parts of the brain, and describe what Wigan called "The Duality of Mind". The brain would seem therefore to be the place to begin our study of creativity in the arts.

B] THE CHEMICAL LENS (neurobiological)

This is our second lens and it too considers the nature of the brain. A recent New York tines ( ) article on" Madness and Genius" reviewed some recent studies by Jamison( ) Fefiver( ) and others that have looked at the nature of genius in terms of

the bi-polar factors of depression, of elation, of moodswing; all of which in their more pathological aspects can be seen in the manic-depressive personality. Relationships between madness and genius has long fascinated scholars in the arts. Artists such as Goya, Van Gogh, Shuman, Woolfe, Hemingway, Thomas, Pollack, and De Kooning have been cited as examples of the relationships between genius and madness.

On the neurobiological level we have the interaction of brain structures on personalities to produce either great art or science (the positive aspect); or sever mental disability (the negative aspect). This analysis is not as concerned with the state of affairs in either right or left cerebra but in the conflicts, the complex chemical or biological relationships which effect the whole brain. Our chemical lens is a second source for data, a second grid through which to view the creative act; a grid which considers the whold brain. (It is of some interest to note that Wigan's 1844 book was an attempt to study the possible sources of madness as a consequence of the duality of mind. This second lens looks at the whole brain as a source for madness or for genius. This does not invalidate the

observations of Wigan and others but only provides another level of analysis.

C] THE SPATIAL LENS (psychometric data)

Eliot (1988) has observed that we all construct within our heads (our minds), a view of the external world. Weisel and Hubel( ) have observed that the neurological set to respond is often programmed to occur before a conscious decision is made to commit a specific act. The work of Eliot and others now brings us to an area or to a lens which can be measured by tests or experiments in the laboratory. This lens is basic to a study of the visual artist (more so then is language for example) and it does deal with those basic modes of interacting between the individual and his external world that are the ultimate basis of creativity in all of the arts. The sensory world are the way sensory inputs are prcessesd by both hemispheres and is a fundamental component of the study of creative individuals in the arts.

For example, in a ten year study of the spatial habits of art students, we have been able to measure and to group 43 different

individual spatial patterns. We do not all process spatial (sensory) data in the same manner.[5]

Those who have studied questions of individual difference in the arts have proposed various spatial types. Witkin, (1963) attempted the classification into field dependent vs. field independent. Lowenfeld(1957) described the creative or artistic types as visual vs. haptic. Mc Fee (1957) tried to account for each in terms of a set to respond. Based on our research we would argue that the question of individual spatial patterns is a complex one and provides a third lens through which to view the individual. Eliot (1988) has ascribed such patterns to two modes of spatial intelligence, the manipulative vs. the recognitional; Stumpf (1993) has considered them as either analytical or holistic.

If we now pause and let us consider our three lenses discussed so far in this paper. An individual could be assessed as being:

right hemisphere	right hemisphere
manic	depressed
analytical	recognition

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field dependent field independent

visual haptic

(The same could be done for the left hemisphere.) groups)

One may now get a glimpse of the complexity in our task. Through each lens we get a rateing or a classification that is not dependent upon another lens. In other words, each classification in our five categories is independent of the other categories. What we propose here is a system very different from what has gone before in many research areas. What we propose is a system or a model which is in a spiral and not presented as a grid.

We propose that our system, which is far more complex, as a spiral (either ascending or descending). It has the capacities to describe a fuller range of individual difference. It does not force polarities which may structure data and observations into more false categories as might be true with the two dimensional models which by their very nature are grids.

D] GENDER RELATED DIFFERENCES

If we add male and female to our group of lens we further

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compound an issue. La Pierre (1993) has looked at differences in spatial intelligence and she along with Halpern(1992) have questioned the status quo of gender related differences. This is probably our most environmentally sensitive lenses of the five suggested for our models.

5] MBTI) THE JUNGIAN TYPES)

Finally we add a fifth lens, the Jungian and by so doing we probably push our system to the edge of complexity. We have achieved chaos which probably can best be defined as order on the edge of complexity. (or maybe complexity on the edge of order) There are according to the MBTI 16 different possible classifications based on an individual personality . If we look once more to our system, let us again consider two kinds of right hemisphere types (it could also be for left hemisphere types also).

right brain	right brain
manic	depressive
manipulational	recognitional
field dependent	field independent

female female

inft infj

CONCLUSIONS

We have proposed the outline of an grand theory for the analysis and the description of the creative and artistic individual. We propose a spiral model which produces five lenses or levels thorough which the process can be viewed. One could begin to speculate upon the width and the shape of each of these lenses or on the whorls of the spiral itself. Closer together more integrated; wider more diverse. One could propose to have computer generated patterns, one could even design analyses based on formulas for the width and depth of the spirals. Finally, what we propose is a mathematical model, a three dimensional model which is holistic rather then linear, which is a spiral rather than a grid. This proposed model has a capacity to be more complete, to describe or make possible a description of the creative personality. One should probably note here that in 1951 Guilford proposed a model for his structure of the intellect that was also a three dimensional structure. Unfortunately, as a cube rather then as

a spiral Guildford's model proved to be less effective in describing individual differences in creativity in the arts.

The purpose of this paper has been to identify and to describe the five lenses. The idea is that the use of these lenses or screens will prove more usefull to the study and the description of the creative personality in the arts then any one if employed alone. We have also argured in this model that we have tried to avoid the use of lists or catagories which tend to be one dimensional. The use of profiles of creative individuals has not proved to be usefull in the past because of the great diversity and the vareity of individual differences. This model is not intended for only psychological or historical research but is proposed as a general model.

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